GENERAL SERVICES ADMINISTRATION

Performance Work Statement (PWS)

Resident Management System (RMS)
IT Support

U.S. ARMY CORPS OF ENGINEERS, LOS ANGELES DISTRICT
Apple Valley, CA

GSA COI: ID09150014

As of April 22, 2015

1.0 General.

Organization to be supported:
U.S. Army Corps of Engineers
RMS Center
22565 Hwy 18
Apple Valley, CA 92307

The General Services Administration (GSA), Pacific Rim Region is conducting this acquisition on the behalf of the Army Corp of Engineers. The contract type will be a mixed Firm Fixed Price (FFP) and Time & Material (T&M). The contractor shall be responsible for providing all the necessary labor and equipment to accomplish the requirements in this PWS with the exception of the Government Furnished Items and Services identified in paragraph 5.0

The Contractor shall be responsible for complying with all applicable Federal Acquisition Regulations (FAR), Defense Acquisition Regulations (DFAR) and General Services Administration Acquisition Manual (GSAM).

1.1 Project Objective and Background:

Objective:
The objective of this requirement is to develop, maintain, modify, test, implement, and support an integrated information system for the U.S. Army Corps of Engineers Los Angeles District Field Office at the Resident Management System Support Center located in Apple Valley, CA. The Resident Management System (RMS) will increase the quality of construction enforcement by resident field offices by providing contract administration and quality management tools to assist in comprehensive planning, daily management, and control and evaluation of construction.

Background:
The U.S. Army Corps of Engineers, Los Angeles District, is an operational office of the South Pacific Division, Corps of Engineers, for the design and construction of civil facilities and construction of military facilities for the U.S. Army, U.S. Air Force, National Aeronautics and Space Administration, and other government agencies as assigned. The Construction Field Offices assist in this mission.

The Resident Management System (RMS) and sub-modules were developed and are being maintained by the U.S. Army Corps of Engineers for use by all construction and dredging field offices throughout the Corps of Engineers. The program is sponsored by Headquarters, U. S. Army Corps of Engineers. The functional design, development, maintenance, modification, testing, and implementation support is being managed by the Resident Management System Support Center in Apple Valley, CA near Victorville, CA, where the work will be performed. The Resident Management System (RMS) is an integrated information management system that increases the quality of construction enforcement by resident field offices. The system provides contract administration and quality management tools to assist in comprehensive planning, daily management, and

control and evaluation of construction, dredging and architect/engineer (AE) projects. The Contractor Mode of RMS is utilized by construction contractors to exchange information electronically with the Government.

While the 3.0 version of RMS is developed and fielded, the previous version, 2.38, is maintained as necessary. This ensures full availability until the 3.0 version is complete and robust. RMS 2.38 is deployed using RDP to USACE citrix servers. Tools are available for synchronization of all citrix servers in the farm. RMS 3.0 is self updating with the initial install file available via a web url. RMS 2.38 sees approximately 1200 concurrent users at peak time. RMS 3.0 will be much higher. There are no existing metrics for this but best estimate is approximately 6000 concurrent users at peak time.

The number of RMS users is approximately 17,150 government users at 46 district sites worldwide. The number of construction contractor sites is approximately 21,000. The RMS Center receives approximately 90 helpdesk calls (voice calls, emails and trouble tickets) per day. The estimated helpdesk calls are broken down as follows: 20% Contractor Mode Install issues, 10% RMS Functional inquiries, 20% network installation issues, 40% RMS Data Exchange issues, and 10% RMS generated system error resolution.

2.0 Definitions.

Definitions/Acronyms

ACE-IT - US Army Corp of Engineers Information Technology Services
CFE - Contractor Furnished Equipment
DFAR - Defense Acquisition Regulations
FAR - Federal Acquisition Regulations
GFE - Government Furnished Equipment
GSA - General Services Administration
RMS - Resident Management System (Government Construction Management System)

3.0 Specific Requirements.

3.1 CLIN 0001: Onsite Deployment Help Desk Support for RMS

3.1.1 The contractor shall provide technical support to all RMS users as described in Paragraph 1.1 Background. Technical support shall include data calls, phone calls, teleconferences, meetings, email correspondence; system generated correspondence and on-site visits. The contractor shall provide technical support for all RMS functions including but not limited to data warehousing, information processing, network processing, report generation, file transfer, database usage, configuration, updates, training materials and other RMS system inquiries related to its function and operation.

Occasionally, USACE personnel travel to the RMS center for specific support needs. This is rare but when needed, it may involve request from high level USACE personnel. When it occurs it may involve setup and configuration of software on a laptop brought with the personnel to the RMS center. It may also involve direct training or explanation of RMS functionality.

3.1.2 The contractor shall maintain a RMS help desk to provide technical support to all RMS users. The RMS help desk shall be supported from the hours of 7 a.m. through 3:30 p.m. Pacific Time, Monday through Friday, excluding weekends and government holidays. The RMS Center receives approximately 450 helpdesk requests per week with an average incident contact time of approximately 15 minutes. This process averages 120 hours per week.

Approximately 10% of the issues get escalated into tiers II and III. Each major version of the software contains new features which inevitably require refinement and explanation to end users. Therefore, the help desk counts increase dramatically after a major release. It is estimated that the support issue count may increase by as much as 100% following such a release. Historically, the number of issues trails off within 3 to 4 weeks following the release. The majority of support issues are closed quickly. The backlog of open issues which require ongoing investigation and interaction is approximately 30.

While handling technical support issues, the contractor shall use the Government Furnished Equipment (GFE) in order to access production data and production resources to aid in troubleshooting the issue. The contractor will use Contractor Furnished Equipment (CFE) as needed for more intricate problem resolution including problem reconstruction, source code review and the creation and use of test data.

CFE is required to allow support personnel to work with development tools, databases, utilities and other non ACE-IT approved resources. Help desk software is at the contractor's discretion. The current system is kayako helpserve.

3.1.3 The contractor shall respond to problems through discussion with users via telephone calls, email, trouble system and personnel requests for technical support. Documents, tracks, and monitors the problem. Includes problem recognition, research, isolation, resolution, and follow-up steps. Resolution includes software development and modification as well as training material development and modification. Documentation and tracking of technical support issues shall be done on the CFE. This is required in order to support non- government (contractor) users, however, for better management and control, all tracking and documentation shall be done on CFE. Resolution of the technical issue will be done on CFE when the resolution involves non production resources. If the resolution requires production resources or official Government test system, GFE shall be used.

3.1.4 The contractor shall assist in deployment and installation of RMS Corps-wide. The contractor shall insure all new releases of applications and application tools (utility programs) have been approved and coordinated with the government prior to

deployment. The contractor shall insure the deployment and installation of RMS applications and utility programs Corps-wide is accomplished with minimum disruption to the RMS users. The contractor shall develop methods to automate and simplify the deployment and installation of RMS applications and automated tools. The contractor shall insure all disseminated new applications and tools have been tested and are free of viruses and bugs prior to being deployed. The contractor shall provide technical support and assistance to all RMS users as requested. The contractor shall use CFE while testing and deploying non production versions of the application or any relevant resources. All deployment for production or official government testing shall be done on GFE.

The contractor shall work with USACE IT staff to configure an appropriate test environment on GFE. The government will provide hardware and software for the test environment and data center personnel for management of the environment. It is the contractor's responsibility to determine the requirements and configuration needed for the test environment.

RMS 2.38 is currently released approximately 6 times per year. Due to the current state of the project, the newer version of the application (3.0) will require more frequent releases than normal. It is expected that monthly releases will be an appropriate cycle for the 3.0 version of the software. This will vary depending on identified requirements from USACE and end users.

3.1.5 CLIN 0002 (Optional CLIN)

The contractor shall provide RMS technical training to all RMS users. Technical training shall be provided for new users and current users. Prior to deployment of updates and modifications to an existing RMS version, the contractor shall provide guidelines and instructions for use of the new versions to all RMS users via multiple media including approximately 5 minute training videos. At least one of these videos shall be produced each month, shall include consistent opening and closing sections and shall be approved by the contracting officer representative (COR) for meeting the quality standards to represent the U. S. Army. The contractor shall maintain all technical training materials developed on a website accessible to all users. The contractor shall keep the website accurate, up to date and functional.

Technical training shall be done utilizing CFE unless the use of GFE is required due to the nature of training. Such use may be needed when training on operations involving interfaces to other government systems. Completed training materials shall be posted on GFE servers for access to all users. The development of the technical training materials will be done using CFE. The completed materials will be posted on GFE servers. The hardware and OS are maintained by Government IT staff. The web server software, application and pages are developed and maintained by the contractor.

The website should present a professional layout making it reasonably easy for users to find the desired training material. The training materials should include PDF versions of user guides and training videos in one of the widely acceptable video formats. The format and structure of the video training is at the discretion of the contractor. The

requirement is that the training be efficient, professional and effective. Desktop captured video is likely the most appropriate format.

Exercise of the optional CLIN will be at the full discretion of USACE.

3.2 CLIN 0003: Application Database Administration

3.2.1 The contractor shall design, implement, and maintain the current Resident Management Systems Oracle databases including maintenance of database dictionaries and integration of systems through database design. The production databases are currently Oracle Version 11.2.0.4.0. The contractor defines the structure of the application database including tables, fields, indexes, constraints, stored procedures and triggers. The contractor is responsible for tuning the database from an application perspective. The contractor is responsible for updating the database as required by the application in regards to schema changes (tables, fields, etc…) USACE will install and update the Oracle database software. USACE is responsible for tuning the database from a systems and hardware perspective.

There are 46 production district databases for RMS. There is also a consolidated RMS database which aggregates data from each district via a batch process. There are approximately 400 tables and 10,000 fields per database. Database storage space for all production districts is 2.359 Terabytes. A high growth rate is expected as RMS 3.0 gains usage. Database servers are provided by USACE.

3.2.2 The contractor shall deploy and install RMS Corps-wide. The contractor shall insure all new releases of applications and application tools (utility programs) have been approved and coordinated with the government prior to deployment. The contractor shall insure the deployment and installation of RMS applications and utility programs Corps-wide is accomplished with minimum disruption to the RMS users.

3.2.3 The contractor shall develop methods to automate and simplify the deployment and installation of RMS applications and automated tools. The contractor shall insure all disseminated new applications and tools are tested and are free of viruses and bugs prior to being deployed. The Contractor shall work to ensure data quality for loading data into the database and reporting on the data.

Prior to release of software updates, the contractor shall insure that the software is free of viruses and major application errors prior to release. In addition, the contractor should use reliable testing methods such as unit tests, and/or automated UI testing to assure that the software is of a reasonably acceptable quality prior to release.

3.2.4 The contractor shall use CFE for the design, development and initial testing phases of database administration. Development databases shall be installed and maintained on CFE. All production databases and applications will be deployed to GFE.

3.2.5 The contractor shall provide a Continuity of Operations Plan (COOP) with dedicated points of contact. The contractor shall provide assistance to ACE-IT during any COOP events. The contractor shall schedule and plan for COOP exercises and tests in cooperation with ACE-IT. The contractor shall maintain documentation of all application users with privileged rights. The contractor shall maintain acceptable audit procedures for the RMS application and application user accounts. The annual COOP events are short term and should generally be complete in less than 5 business days per year.

3.3 CLIN 0004: Software Documentation

3.3.1 The Contractor shall be responsible for documenting all application program functionalities. The contractor will provide resources needed to prepare software documentation as is required by the government. This will include, but may not be limited to, requirements, specifications, testing criteria and plans, testing results, and performance analyses.

3.3.2 The Contractor shall be responsible for maintaining and keeping the RMS User's Guide (600 pages) and Contractor Module User's Manual (200 pages) up to date. The RMS User's manual and Contractor Module User's manual have 2 major updates per year with about 50% of the manuals requiring updating. The contractor is responsible for preparing and presenting 4 RMS Steering Committee Updates (20 slides) per year (quarterly) via internet and teleconference.

The current RMS user guide is 278 pages. The contractor's guide (QCS 2.38) is 228 pages. It is expected that on average, approximately 25% of the documentation should be updated and refined annually. Therefore approximately 120 pages of documentation should be revised or redone each year. See the PWS regarding expectations for training videos.

Software documentation shall be done on CFE as application modules are completed. The contractor shall use CFE for the general development and maintenance of software documentation. When necessary for documentation purposes, the contractor may use GFE for screen captures or similar documentation when government interfaces preclude the use of strictly CFE.

3.4 CLIN 0005: RMS Development and Support for System Enhancements

Work performed under Section 3.4 will be accomplished as a T&M CLIN with a not to exceed ceiling of $1,000,000.00 per year.

As the system is used, the Government will identify required enhancements. These enhancements are typically derived from user requests, interface requirements and/or requirements driven by changes in business processes. Historically the level of staffing for RMS Enhancements has been four (4) contractor employees.

The contractor shall use CFE for the design and development of system enhancements. Design, coding, testing and acceptance shall be conducted on CFE. Deployment of completed enhancements shall be accomplished using GFE. When necessary for

development due to the nature of the task, the contractor may access GFE resources for reference. However, all actual development shall be done on CFE.

The contractor shall be responsible for user account management at the application level. This includes the responsibility to accept account requests, verify user identification, verify need to know and properly assigning and documenting user privileges.

The following are requirements for Resident Management System Enhancements:

- Specify and review requirements
- Design
- System Design Review
- Code
- System Test
- Integration Test (Optional depending on system interfaces)
- System Acceptance Test
- Implementation

Listed below are examples of major enhancements done in the past for the RMS:

- Added Property Voucher Number to the 1354 report and screens
- CLIN Unit of Measure support for JA, JB, 8P, LT
- Updated Real Property Codes in library tables
- Added error messages for Contract Number and Delivery Order Number when closing Mod Packages. Format and content must follow government rules
- Developed an interface with PCF to transfer contract documents
- Added ability to disable selected contracts for PCF interface
- Enhanced the tracking and reporting of PCF Document error messages
- Added data elements to dredging waterways
- Analyzed, designed and deployed solution to address USACE CLIN unit of measure issues related to Undersecretary of Defense Memo on LS unit
- The US Army Corp of Engineers Information Technology Services (ACE-IT) required the submission of sample RMS 3.0 Installer configured for .NET 4.5 for testing
- Changes to RMS EMAIL notifications server due to problems with Verizon outgoing SMTP server limitations
- CCASS was decommissioned requiring the removal of CCASS related batch processes from the RMS servers
- Custom queries written for Afghanistan to support special request for placement data
- Analysis and Code Customizations triggered by changes to CEFMS (Automatic accruals, department code changes, CLIN units of measure)
- Coding of Changes to the CCG Metrics reports due to USACE Headquarters changes to the metric definitions
- Analysis of options to authenticate contractors for RMS 3.0 to comply with ACE-IT security requirements

- Coding changes to implement changes made to the standard 1354 form
- Coding changes to implement changes made to the Prompt Payment Certification Report
- Analysis, Systems Work, Development work expended to address issues created when ACE-IT brought down the RMS website due to a false positive threat of malware
- Meetings, Analysis and Database changes made to support a basic interface between RMS and COBie due to new contract spec sections requiring the use of COBie for construction contracts. It is expected that an ECB may issue mandating the use of COBie for MILCON construction.
- Completely rewrote the RMS GIS website due to ACEIT mandating the decommissioning of the server on which it was running. The new version is a module within RMS 3.0
- Devised and executed a query at the request of USACE headquarters to tally the number of projects and their value for all RMS districts and to group the results by contract stage.
- Complete the development of new contractor payroll modules for review by USACE payroll experts in preparation for future production deployment.
- Disable all menu items when applications are run in automated batch mode to prevent users from accessing program options during batch imports and exports.
- Allow Quantity CLINs to be paid over their current amount if they are not pre planned CLINs.
- Add a contract setup option to force the prompt payment documents to include all activities for a contract if the RMS user so desires. This allows for full reporting of all activities on selected contracts while still producing shorter prompt pay documents when this option is not selected.

The number and complexity of changes required under section 3.4 is highly variable depending on the needs of the Government including USACE, DOD, other agencies and Congress.

RMS 2.38 is currently released approximately 6 times per year. Due to the current state of the project, the newer version of the application (3.0) will require more frequent releases than normal. It is expected that monthly releases will be an appropriate cycle for the 3.0 version of the software. The number of releases will vary depending on identified requirements from USACE and end users.

The number of software issues will be highly dependent on the quality of the development process. Testing should be configured to utilize automated testing methods. The testing process should be configured such that a release candidate can by fully tested using both automated and manual testing methods within one business day.

3.4.1 RMS Development and Support Technical Skills and Capabilities

The skills and capabilities to develop and support the RMS system include (1) management of the technical project, (2) development and maintenance of source code and (3) ability to support the deployed application.

1. Management:

Management of the project should reflect industry standards and best practices, including the use of Agile/Scrum or some equivalent. Management should maintain an accurate and complete breakdown of required features and issues in a product backlog or other appropriate data store. Management should prioritize the product backlog and assure that backlog entries are well specified and clear. Due to the complexity and nature of the RMS project, management should be very knowledgeable in the computer science and application development arenas.

Management should staff the project with competent technical staff and should provide a stable and effective work environment. Management should utilize practices which acknowledge the importance of stability in staffing due to the extensive technological and business process learning curve on this project. Staff stability is also important due to the remote work location and associated difficulties in recruiting qualified staff. Management should assure that appropriate staffing levels are provided to meet all contractual requirements.

2. Development and Maintenance:

The development skills required for the RMS system should reflect current best practices in the field. The technical staff should have sufficient skills and training to remain current in evolving technologies and practices in the application development arena. The staff recommend new techniques and be prepared to put them to use as appropriate in order to keep the RMS system up to date with the industry. The primary platform for the RMS system is currently the MS Windows desktop environment with supporting web services. Development skills should be adaptive in order to support possible alternative platforms such as web applications and mobile. The current state of the RMS system primarily utilizes the technologies below.

Application programming languages include C# (Visual Studio) and C++(Embarcadero C++ Builder). Developers should be familiar with basic and advanced concepts in C# and Microsoft dotNET. A strong familiarity with concurrency, threading, and asynchronous programming is required. Developers should be familiar with collections, file I/O, and common dotNET interfaces such as IDisposable, INotifyPropertyChanged and INotifyDataErrorInfo.

The RMS System User interface development is primarily in MS Windows Presentation Foundation (WPF). Developers should have the ability to design, implement, test and refine a modern user interface under WPF. This includes the

use of data grids, object validation and asynchronous UI operations. Development of the RMS UI should include well structured and testable composition such as the Model-View-ViewModel (MVVM) pattern.

The RMS system primarily utilizes the Oracle DBMS for database storage. The RMS staff should be highly competent in the design, development, and maintenance of a large scale Oracle DBMS. Required skills include data definition language (DDL), SQL and PL/SQL. In depth knowledge of Oracle best practices is required and should be utilized to propose and implement database changes for high performance, high reliability and recovery. The currently deployed version of the QCS module of RMS utilizes the Firebird version 2.0 and higher database engine. In addition to strong knowledge of Oracle, the staff should have the ability to support Firebird databases during the transition to the newer versions of RMS.

The RMS system provides end user operations in a diverse IT environment including construction contractors with minimal and unreliable networking resources. The system operates as an occasionally connected application with automatic background data synchronization. The development staff should have computer science skills appropriate to implement and maintain such a system. This includes familiarity with encryption, hashing, internet communications and data synchronization.

The development staff must have the skills to develop, maintain and refine RMS web sites and web services. This includes knowledge of Internet Information Server (IIS), HTML, CSS, JavaScript, ASP.NET MVC and ASP.NET MVC web API.

In addition to the above technical skills, the development staff must have the skills and ability to implement the RMS application subject matter (Construction Management). This includes knowledge of construction scheduling (CPM/NAS), construction quality assurance/quality control practices, document storage including electronic signatures and USACE construction finances. The staff must have the ability to build and maintain interfaces with other systems utilized by the USACE enterprise such as CEFMS, SPS, P2 and PCF. Development of interfaces using known publish standards such as SDEF and SPECSINTACT are required.

3. Support:

The technical support staff should have the requisite skills to support the RMS system. Support staff should have the ability to explain and troubleshoot technical issues for RMS end users. Support staff should be familiar with USACE business practices to the extent necessary to clearly explain how they are implemented and utilized in the RMS system. Support staff should use an appropriate issue tracking system so as to keep accurate and useful metrics on technical support demands. The support staff should use methods which recognize repetitive support issues and

provide readily available resources to help users resolve such issues.

In addition to providing technical support in issue resolution, the support staff should have the appropriate skills to document the RMS system and to develop appropriate training materials. Support staff should have the ability to develop clear, useful and coherent user guides, newsletters and training videos for the RMS system. Support staff should have the ability to develop well formed, clear and effective documentation and training materials.

3.5 CLIN 0006: Information Security

The contractor shall assist the chief of RMS in maintaining the RMS Certificate of Networthiness (CON) by describing how the RMS system processes data in the context of CON network analysis. This includes the identification of ports and protocols used.

The contractor shall assist the chief of RMS in maintaining the RMS Authority to Operate (ATO) at the MAC II Sensitive level by describing in detail how the system operates and what infrastructure facilities it relies on for deployed operation.

The contractor shall implement all cryptographic routines such that they are compatible with FIPS 140-2 requirements.

4.0 Delivery Schedule

The following table delineates the required deliverables and their respective due dates during the performance of this task.

PWS Reference	Deliverable	Due Date
3.1	Support Logs	Support logs including basic information about support incidents and their resolution are to be maintained. Such logs are to be delivered within three workdays after receipt of a request.
3.1	Training Videos	Training videos for the RMS system are to be developed and provided by the contractor. Such videos are to be delivered to USACE for deployment upon completion. Backup copies are to be provided to USACE within three workdays after receipt of a request
3.2	Database Administration Logs and Reports	The contractor is to maintain the structural integrity of RMS databases and assure database conformity. Logs and reports showing structural integrity and conformity are to be maintained and provided within 5 days of request.
3.3	Software Documentation	Software documentation for the RMS system is to be developed and provided by the

		contractor. Such documentation is to be delivered to USACE for deployment upon completion. Backup copies are to be provided to USACE within three workdays after receipt of a request
3.3	Software Documentation	Four quarterly steering committee conference calls are to be conducted by the contractor. Presentation materials, including power point slides are to be made available 5 workdays prior to the time of the conference call
3.4	Source Code	Source code for RMS and its associated software which is developed under this contract is to be maintained in a source control system. Source code is to be provided to USACE within three workdays of request.
3.4	Executable Applications	Executable files for RMS and associated software are to be made available upon completion. Backup copies are to be maintained for each version and made available within 3 workdays of request.
7.0	Revised and updated Quality Control Plan	Within 10 calendar days after award
8.5	Monthly Status Report	By the 10th workday of the following month
	Final Invoice	No later than 90 days after contract completion

5.0 Government Furnished Items and Services.

5.1 Facilities, Supplies and Services.

The client will furnish the following: office space, office supplies, non development computer equipment, telephone, and reproduction facilities as needed. The Government may provide software tools and services as funding is available. The contractor will not use Government furnished facilities, supplies, equipment, and services for personal use. Each contractor has a GFE computer and connection to the USACE network.

5.2 Information.

The following information will be provided by the client:
Manuals, text, briefs and other materials associated with the hardware and software. Initial familiarization and orientation will be provided by the user agency. Standard operational procedures will be available to the contractor at the place of performance. The Client will also make available relevant standards, functional statements, technical manuals, computer systems guides, regulations, instructions, and operational procedures.

6.0 Contractor Furnished Items and Services.

The Contractor shall provide all equipment not specifically Government furnished.

This includes, but is not limited to sophisticated software development computers with dual monitors. One computer and 2 monitors per staff member plus 4 servers with 1 monitor for them to share.

In addition to the aforementioned IT items, the Contractor shall provide labor and management and administrative services to ensure the successful performance of this task as well as to prevent cyber attacks against the CFE.

7.0 Quality Control and Assurance

7.1 Quality Control Plan

The Contractor shall develop and maintain an effective quality control program to ensure services are performed in accordance with this PWS. The Contractor's quality control program is the means by which the Contractor assures itself that all work complies with the requirements described in the PWS. The Contractor shall develop and implement procedures to identify and prevent defective services and ensure the non-recurrence of such services. The Contractor shall apply industry standards and best practices to include, at a minimum, identification of quality control factors and processes, evaluation methods, performance monitoring and process improvement. The Contractor shall develop a contingency plan to ensure deliverables are met on time.

The Contractor's Quality Control Plan (QCP) shall describe a process that supports the execution of this task as delineated in this PWS. The QCP shall include inspection, validation, evaluation, corrective action and procedures necessary to affect quality control of all performance and products under this task in accordance with the Government's Quality Assurance Surveillance Plan (QASP) in Appendix A. The QCP shall include an inspection system covering all the performance evaluation attributes. It must specify the areas to be inspected on a scheduled and unscheduled basis, how often inspections shall be accomplished, the title of the individual(s) who shall perform the inspection, and the methods for identifying and preventing defects in the quality of services. The Contractor shall allow inspection and evaluation by the Government throughout the task period. Records of all inspections conducted by the Contractor and necessary corrective action taken shall be made available to the Government during the term of the task.

The Contractor shall provide a revised, updated QCP within 10 calendar days after award for approval by the Government. The Contractor shall review and update the QCP annually and provide a copy to the Client Representative and COR and upload a copy to the AASBS web site.

7.2 Quality Assurance Surveillance Plan (QASP)

Since this is a performance-based contract, the Government must effectively validate in a timely manner the Contractor's performance in meeting the requirements. The QASP provides a systematic surveillance method by which the Contractor's performance shall be monitored. The principal focus of the surveillance system is the Contractor's performance in key areas identified in the QASP.

The Contractor shall be responsible for project management and quality control necessary to achieve quality in the delivery of services. The QASP is not intended to duplicate the Contractor's quality control procedures. The Government reserves the right to make unilateral changes to the QASP at any time during the contract period. The level of surveillance may be altered based upon the Contractor's actual performance.

The Government will evaluate the Contractor's performance under this contract in accordance with the QASP in Appendix A. This document is primarily focused on what the Government will do to ensure the Contractor is performing in accordance with the performance standards, acceptable quality levels described therein.

QUALITY STANDARDS MATRIX

Performance Objective	PWS Reference	Performance Threshold
Help Desk: Assure High Responsiveness	3.1	Metric 1: Average Response time not to exceed 1 workday. Metric 2: Maximum Response time not to exceed 2 workdays.
Help Desk: Assure High Quality	3.1	Support Incident Surveys with ratings: 5-Highly Satisfied 4-Very Satisfied 3-Satisfied 2-Unsatisfied 1 Very Unsatisfied Performance Threshold: Average rating 3.5 or higher
Database Administration: Assure High Structural Quality	3.2	Random inspection and document review of database structure should clearly show high structural quality of the RMS database. Tables, fields, indexes and triggers should reflect USACE business entities and processes. Obsolete tables and fields should be removed within a reasonable timeframe.
Database Administration: Assure High Structural Conformity	3.2	All district RMS databases (currently 46) should conform to the official database schema version as deployed to each district. Consistency among all table structures, indexes, should be observable by random inspection of document review.
Database Administration: Minimize Application Imposed Downtime	3.2	Downtime due to application required database migrations is to be minimized during normal work hours. Performance threshold: Maximum 6 impacted work days per year.
Software Documentation: Assure Timeliness of Availability	3.3	Software documentation should be made available in a timely manner. Two major updates of the User Manuals should be

		executed each year. Documentation for newly released revisions should be made available within 20 work days of the released software.
Software Documentation: Assure Completeness of Documentation	3.3	Software documentation should cover system functionality with reasonable completeness. All major modules and sub modules should be documented.
Software Documentation: Assure High Quality	3.3	Software documentation should clearly explain concepts, operations and system features. Proper language, diagrams, images and formatting should be used for effective communications.
Steering Committee: Conduct 4 Quarterly Conference Calls	3.3	The contractor should conduct 4 quarterly conference calls with the RMS steering committee to discuss status, issues and direction. The 4 conference calls should be timely executed each quarter.
Development of System Enhancements: Timely Release	3.4	The contractor should utilize an industry standard software management process such as agile/scrum to manage the software development process and plan for timely release. The development of system enhancements should be completed within a reasonable time frame and made ready for deployment.
Development of System Enhancements: Software Quality	3.4	The contractor should utilize industry standard software quality techniques such as unit testing, integration testing and code reviews to assure quality software. Random inspection or review of documentation should reflect such quality measures.

8.0 Other Information.

8.1 Clearances and Licensing. No security clearance is required for Contractor employees. All Contractor personnel working on this task order must be US citizens. In addition, Contractor personnel working on this task order shall be fluent in the English language as exemplified in their written and verbal skills.

8.2 Place of Performance:
Work will be performed on-site at the following Government installation:

Resident Management System Support Center
22565 Outer Highway 18
Apple Valley, CA

8.3 Period of Performance:
Period of Performance for this project will be 12 months from date of award with four (4) 12-month option periods.

The following option clauses apply to this task order: 52.217-5, Evaluation of Options, 52.217-8, Option to Extend Services, and 52.217-9, Option to Extend the Term of the Contract. If the Government exercises these option periods, the extended contract shall be considered to include these option clauses. The total duration of this contract, when the option periods are exercised under this clause, shall not extend beyond five years. These option periods are considered to have been competed and can be exercised to extend the task order without further advertisement or competition. Option years priced in the original Contractor proposal are binding and can be exercised unilaterally at the discretion of the Government.

52.217-8 Option to Extend Services.

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within 15 days of expiration of the task order.

52.217-9 Option to Extend the Term of the Contract.

(a) The Government may extend the term of this contract by written notice to the Contractor within 5 business days of expiration provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 30 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed five years.

8.4 Travel:

Travel is anticipated in support of this task order. The Government will pay up to the rates specified in the Government Federal Travel Regulations (FTR) for travel destination. Hotel reservations will be made by the contractor and will be reimbursed for actual costs only, with back up documentation/receipts attached to the invoice. NO PAYMENT WILL BE MADE WITHOUT BACK UP DOCUMENTATION and RECEIPTS. The annual cost reimbursable travel ceiling is $25,000.00. Client preapproval is required for all travel. Travel will be directed by the Resident Management System Project Manager. Travel is random at the government's request within CONUS and OCONUS. The contractor shall provide RMS training to users at various locations during the year. Some of the travel locations include Japan, Egypt, Germany, Bahrain, Alaska, Atlanta

Georgia, Washington D.C and Seattle Washington.

Travel is currently infrequent (2 or 3/year). Duration is 1-3 days. Location can be CONUS or OCONUS, but generally CONUS. One or two contractors are required per trip depending on the purpose of the trip.

8.5 Monthly narrative reports (referred to as Monthly Status Reports) which document the work performed under this PWS. The narrative reports shall contain an accurate, up-to-date summary account of tasks completed during the month, tasks on-going during the month, tasks to be worked during the next month, and any outstanding issues.

8.6 Points of Contact:

ClientRepresentative
Mr. Richard Alvarez
Resident Management System Support Center
22565 Outer Highway 18
Apple Valley, CA 92307
Office: (760) 247-0217, Ext. 21
Fax: (760) 247-2547

GSA Project Manager
Tim Martin
Office: (702) 271-8096
Tim.martin@gsa.gov

Administering Contracting Officer (ACO)
Jo Ann Ancheta Lim
Office: (702) 228-0640
joann.ancheta@gsa.gov

8.7 GSA AAS Business Systems (AASBS) Web Portal

The GSA AASBS (Assisted Acquisition Services Business Systems) web portal will be accessible to the Contractor during the performance of this order and be used in the administration of this order. This web-based system at https://portal.fas.gsa.gov/web/guest shall be used by the Contractor to upload monthly status reports, deliverables, invoices, signed GSA Form 3025, and to respond to inquiries. The Contractor shall maintain a current account on this system.

8.7.1 Invoice Requirements

At a minimum, the following information must be included on each invoice.

(a) Contractor's name, "remit to" address, and contact information. The "remit to" address must correspond to the payment address shown on the order.

(b) Contract number, order number, task number, and ACT number.

(c) Invoice number, date, and billing period

(d) Item numbers shown individually, CLIN (subCLIN if applicable) charges, subtotal, credits, deductions, and total amount billed

The Contractor's final invoice for this task must be so identified and submitted after the task has been completed and no further charges are to be billed. Final invoices shall be submitted no later than 90 days after completion of this task order.

8.7.2 Release of Claims
The Contractor shall comply with FAR Clause 52.212-4, paragraph (i), subparagraph (7), and submit a signed and executed Release of Claims with the final invoice.

8.7.3 GSA Electronic Invoicing
All invoicing shall be done electronically. Password and electronic invoice access may be obtained through the AASBS web portal.

The Contractor shall have the client sign the GSA Form 3025 Receiving Report before invoices are uploaded into the AASBS portal. The Invoice, the signed Form 3025, and the Monthly Report shall be entered into the AASBS portal within ten (10) workdays after the end of the month. If the invoices are acceptable, then the GSA PM will approve them for payment and complete the information in the AASBS portal.

8.8 Intellectual Property:
This task order is funded by the United States Government. All intellectual property generated and/or delivered pursuant to this PWS will be subject to appropriate federal acquisition regulations which entitle the Government to unlimited license rights in technical data and computer software developed exclusively with Government funds, a nonexclusive "paid-up" license to practice any patentable invention or discovery made during the performance of this task order, and a "paid-up" nonexclusive and irrevocable worldwide license to reproduce all works (including technical and scientific articles) produced during this task order. FAR part 52.227-14 "Rights in Data – General" and FAR part 52.227-18 "Rights in Data – Existing Works" are hereby incorporated.

8.9 Section 508: All Electronic and Information Technology (EIT) procured through this task order must meet the applicable accessibility standards at 36 Code of Federal Regulations (CFR) 1194; unless an agency exception to this requirement exists. 36 CFR 1194 implements Section 508 of the Rehabilitation Act of 1973, as amended, and is viewable at http://www.access-board.gov/508.htm. The

Contractor shall indicate for each line item in the schedule whether each product or service is compliant or noncompliant with the accessibility standards at 36 CFR 1194. Further, the proposal must indicate where full details of compliance can be found (e.g., vendor's website or other exact location) is viewable at http://www.access-board.gov/508.htm.

8.10 Wage Determination: If applicable, the following paragraphs apply to this task order.

In accordance with Title 29, of the Code of Federal Regulations, Labor Standards for Federal Service Contracts, GSA considers the Service Contract Act (SCA) to apply to this task order.

The Contractor is put on notice that regardless of the rate proposed for billing purposes and payment purposes, the Contractor is required by the Department of Labor during contract performance to pay non-exempt employees at least the applicable wage determination rate for the specific area(s), if a specific wage determination(s) exist. If none exists, the Contractor must pay the non-exempt employees at least the salary portion of the applicable rate dictated by the DOL. In addition, the Contractor will be held to the legal guidelines set by the SCA regarding fringe benefits, safe and sanitary working conditions, notification to employees of minimum compensation allowed, and equivalent federal employee classification wage rates.

8.11 Incremental Funding
This task order may be incrementally funded during the base period and the option periods in accordance with DFARS 252.232-7007, Limitation of Governments Obligation and FAR 52.232-22, Limitation of Funds.

Exhibit 1

Current Information Technology Working Environment

Hardware:
Windows Development PC, Multiple Monitors

Software:
Visual Studio with MSDN Professional License with annual maintenance
Microsoft Office
Commercial Development Components (Telerik)
Borland C++ Builder
3rd Party Components for Borland C++ Builder
Team Foundation Server source control
VMWare
Oracle
Agile/Scrum software

Camtasia screen recording
Adobe Creative Cloud

Networking:
Internet Protocols and TCP/IP
LAN environment expertise
USACE network

Reference Documents:
The Contractor shall adhere to the following documents to the extent they are applicable to the work required by this PWS.

U.S. Army Corps of Engineers User Procedures
GSA IT Solutions Procedures

Historical Staffing Environment

Historically the level of staffing for this requirement has been approximately 9.5 contractor employees per year. Historical labor categories include:

Applications Developer (Journeyman)
Applications Developer (Senior)
Computer Scientist
Database Specialist (Senior)
Helpdesk Specialist (Journeyman)
Training Specialist (Senior)

This information is for bidding purposes only. The contractor's proposal shall meet all the requirements of this PWS.